

United States Public Health Service

Region VIII 1961 Stout Street; Room 498 Denver, Colorado 80294-3538

February 14, 2002

Memorandum

Subject: Review of Proposed ATSDR Public Communication for VBI-70 Site

From: Aubrey Miller, MD, MPH

Medical Director Environmental Emergencies

& Hazards

To: Dr. Chris Weis, EPA Region 8

Dr. Weis,

In response to your request, I have reviewed the proposed ATSDR public health communication for residents of the VBI-70 Superfund site (February 4 version). While I applaud Dr. Mellard's proactive approach to warn area residents about potential environmental hazards around their homes, I am concerned that several elements of this proposed communication (letter) may in fact cause undue fear and confusion among recipients. For instance this letter refers to elevated levels of arsenic or lead in resident's yard soil suggesting the existence of a potential, if not definite, ongoing health hazard. The recipient is not provided with information about the actual hazard on their property, or are they given any guidance with which to gauge the magnitude of their risk against current health guidelines or population based studies. For example, inclusion of comparative risk information such as, "studies have shown that x percentage of children and adults with similar soil concentrations as your yard have experienced elevated blood concentrations and have suffered from x symptoms or have been shown to be at increased risk for cancer, etc," would greatly improve understanding and risk communication.

The intent of this letter is unclear to me. Is the letter intended to raise the level of concern among area residents to increase participation in health meeting or discussions, or is it intended to warn individual residents about a specific hazard on their property? The current wording of several statements in the letter (e.g., "arsenic soil levels in your yard might be a health concern," or "if a person grew up in your house, and continued to live there as an adult, they might have an increased risk of cancer because of arsenic levels in your soil," or "these high lead levels in soil could be a concern for preschool children.") presupposes an ongoing health hazard at individual

properties and is in need of clarification. It would be helpful if recipients were provided information regarding the specific exposure levels "of concern" and why, based on the current scientific literature, that these exposure levels are a risk to their health. Statements such as "might be" or "could be" are confusing; is this a health concern or not? The letter should also provide information regarding the prevalence of soil-pica behavior and why the situation in this community necessitates a community-wide notification.

The wording in this letter appears to be in effect setting a de-facto nationwide public health action level, by ATSDR, for certain arsenic and lead soil concentrations (47 and 540 ppm, respectively). Regardless of the intent, I strongly suggest that the letter include a clear rationale as to why such a health notification is needed at these levels of soil concentration, and if this concern is based on acute or chronic health effect endpoints. Also, applicable scientific references and risk assessments should be cited.

Lastly, if these soil exposures truly warrant the proposed public health communication, then recipients should also be provided with specific recommendations and educational information concerning ways in which their hazard(s) can be reduced (i.e., how can they protect themselves and their families). Presumably, ATSDR officials should also be notifying state, federal, and local health professionals throughout the country confronted with similar at-risk populations.

I understand that Dr. James Ruttenber of the University of Colorado will soon be evaluating the prevalence of soil-pica behavior and the potential associations between current exposures and health endpoints in this community. Given that this research is forthcoming, it may be prudent for health officials to wait and let the actual study results of residents in this community guide any applicable public health communications and recommendations.

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